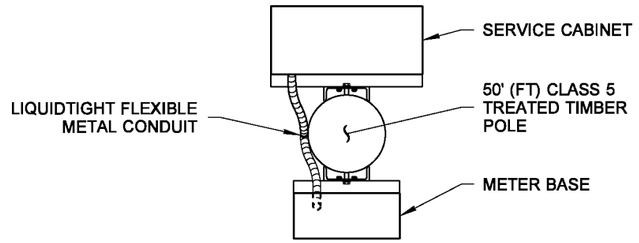
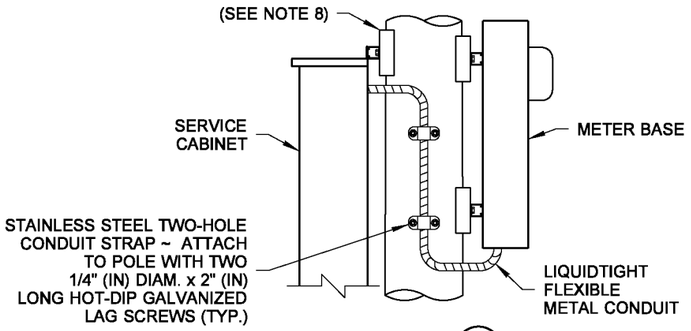



SECTION 1

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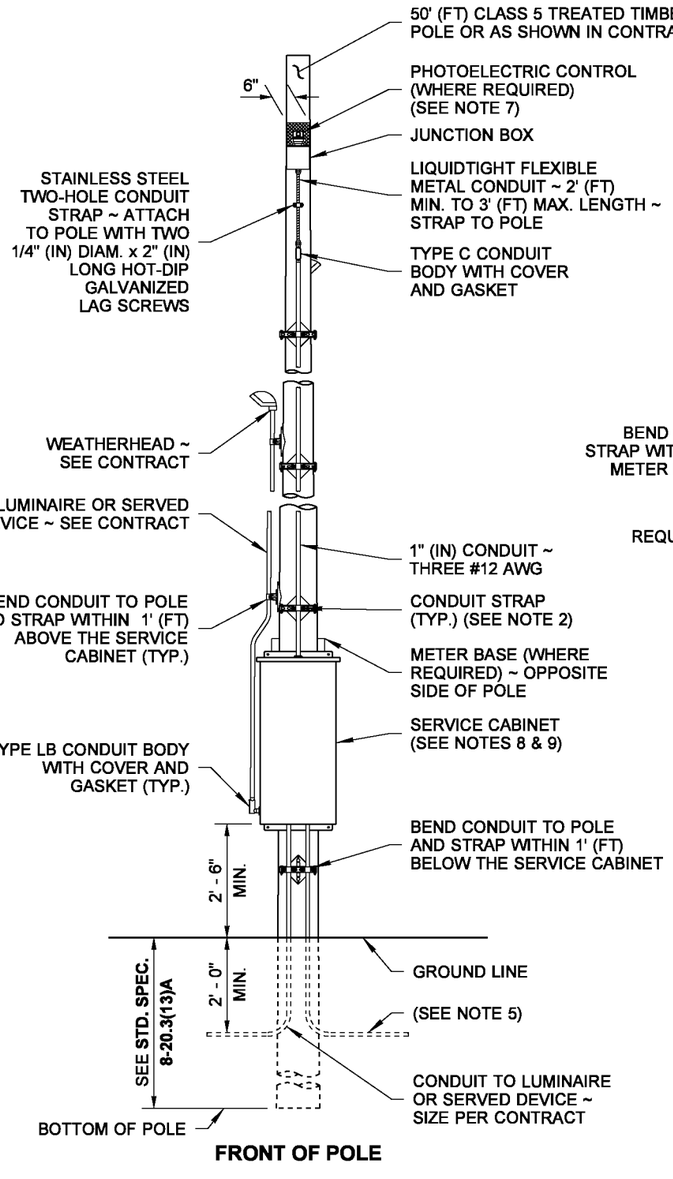
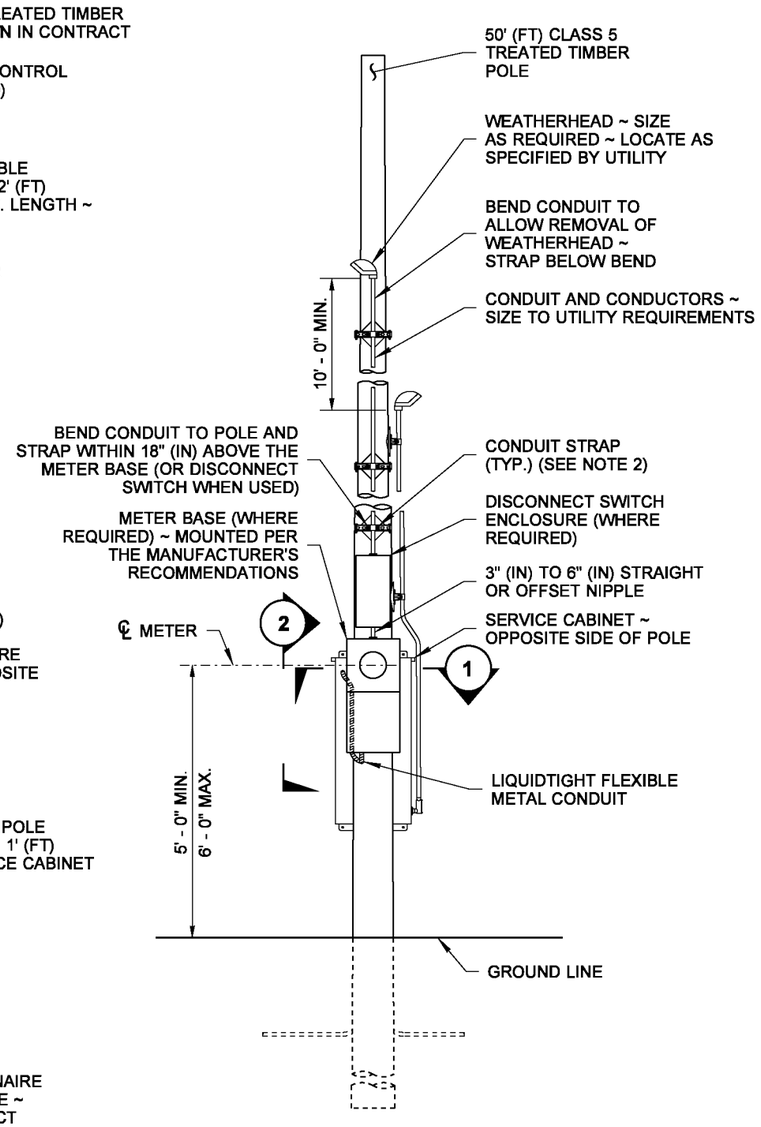


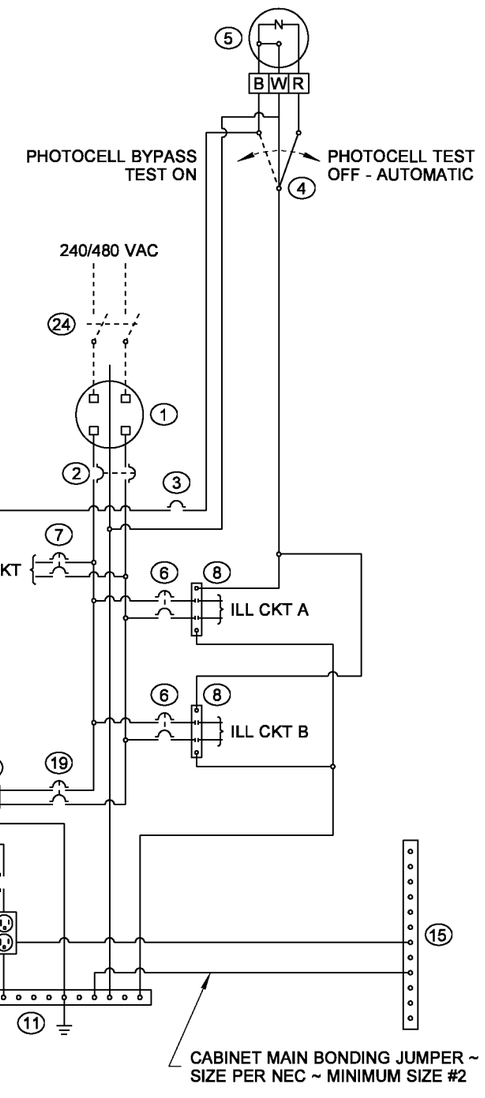

FRONT OF POLE




BACK OF POLE

DRAWN BY: COLBY FLETCHER

## TYPE C SERVICE ~ 480 VOLT




## TYPE C WIRING DIAGRAM ~ 480 VOLT

### NOTES

1. Metering arrangements may vary with different serving utilities. The Contractor shall verify the requirements of the utility prior to installing the service equipment.
2. All service pole conduits shall be secured to the pole with two-hole conduit straps spaced at 5' (ft) maximum centers. See **Standard Plans J-60.13 and J-60.14** for steel channel support and mounting details. Where required by the Utility, an alternative-use hot-dip galvanized standoff bracket may be used. See **Standard Plan J-10.16** for ALTERNATE STANDOFF BRACKET DETAIL.
3. All risers and service equipment shall be installed on side of pole that is away from traffic.
4. Where required by the serving utility, service breakers shall be installed above meter socket in a separate rain-tight enclosure.
5. See **Standard Plan J-60.05** for grounding details.
6. See Breaker Schedule in Contract for breaker and contactor sizes.
7. See **Standard Plan J-10.16** for photolectric control details.
8. See **Standard Plan J-10.16** for service cabinet mounting details.

THEODORE JOSEPH BAILEY
STATE OF WASHINGTON
39820
REGISTERED
PROFESSIONAL ENGINEER

Bailey, Ted
May 28 2015 10:08 AM

# SERVICE CABINET TYPE C (0 - 60 AMP TYPE 240/480 VOLT SINGLE PHASE) STANDARD PLAN J-10.18-00

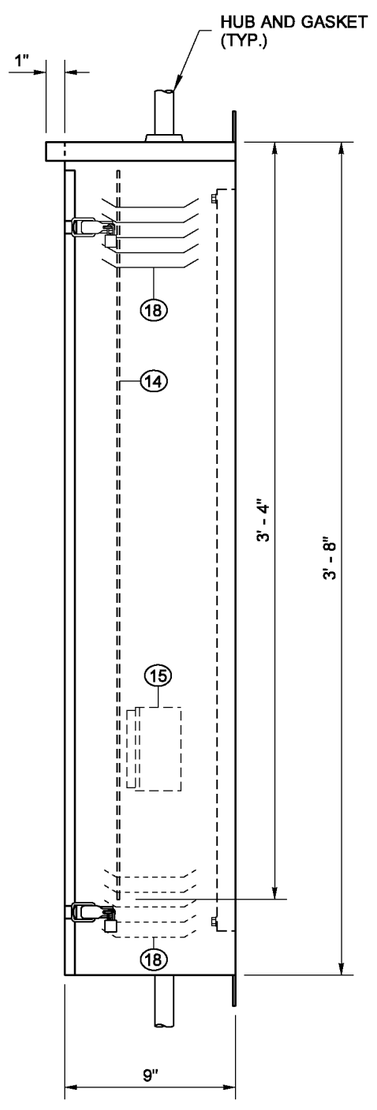
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Bakotich, Pasco
Jun 3 2015 4:20 PM
STATE DESIGN ENGINEER

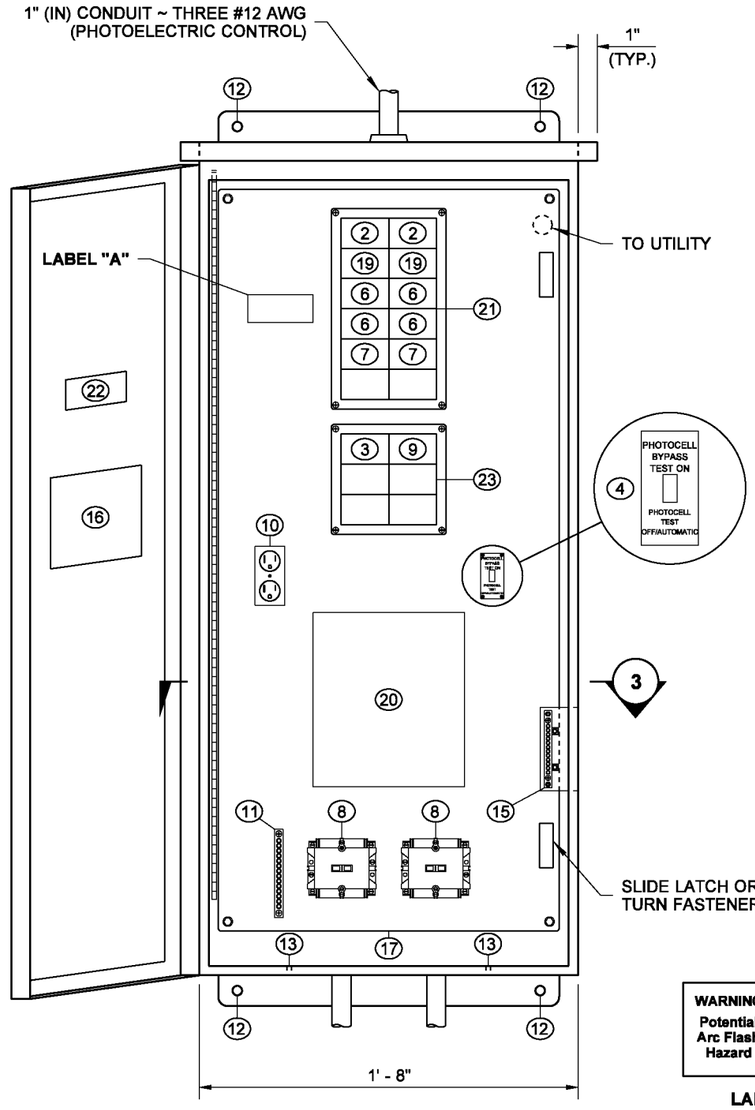
Washington State Department of Transportation

**NOTES (CONTINUED)**

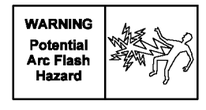
9. See **Standard Specification 9-29.24** (Service Cabinets).
10. Hinges shall have stainless steel or brass pins.
11. Cabinet shall be rated NEMA 3R and shall include two rain-tight vents.
12. The metering equipment door shall be pad-lockable. Each door shall be gasketed. See **Standard Plan J-10.20** for door hinge details. Concealed heavy-duty stainless steel lift-off hinges are allowed as an alternative. Upper left door shall have three hinges, lower left door shall have two hinges, and right door shall have three hinges. All doors shall have a two-position door stop assembly.
13. The following equipment within the service enclosure shall have an appropriately engraved phenolic name plate attached with screws or rivets:
    Key Numbers 2, 3, 4, 6, 7, 8, and 9.
    Key Number 4 name plate shall read as follows:
    "PHOTOCELL BYPASS TEST ON" AND "PHOTOCELL TEST OFF - AUTOMATIC."
    See service cabinet detail.
14. Dimensions shown are minimum and shall be adjusted to accommodate the various sizes of equipment installed.
15. All busswork shall be high-grade copper and shall equal or exceed the main breaker rating. All breakers shall bolt on to the busswork. Jumpering of breakers shall not be allowed. Busswork shall accommodate all future equipment as shown in the Breaker Schedule.
16. The photoelectric control unit shall be centered in the photoelectric control enclosure to permit 360 degree rotation of the photoelectric control unit without removal of the photoelectric control unit or the photoelectric control enclosure.
17. All internal wire runs shall be identified with "TO - FROM" coded tags labeled with the code letters and/or numbers shown on the Schedules. Approved PVC or polyolefin wire marking sleeves shall be used.
18. All nuts, bolts, screws, and washers used for mounting the photoelectric control enclosure, conduit body covers, and junction box cover shall be **ASTM F593** or **A193 Type 304** or **Type 316** stainless steel.
19. A 1% tolerance is allowed for all dimensions.
20. See Contract for Breaker Schedule.
21. Install conduit couplings on all conduits.
22. The photoelectric control enclosure shall be fabricated from 5/8" (in) expanded steel mesh with welded seams and mounting flanges and shall be hot-dip galvanized after fabrication. Type 5052 - H32 aluminum with 5/8" (in) x 5/8" (in) expanded steel mesh may be used as an alternative material. See **Standard Plan J-10.20** for enclosure mounting details.
23. Slotted steel channel and mounting hardware components shall be stainless steel. Conduit clamps shall be hot-dip galvanized steel or stainless steel.
24. When using alternate door hinge, remove hinge pin prior to welding the hinge to the cabinet and prior to hot-dip galvanizing. After galvanizing, replace pin with a brass pin or solder in place. See **Standard Plan J-10.20** for alternate door hinge details.




**SIDE VIEW**




**ELEVATION VIEW**
(14 NOT SHOWN FOR CLARITY)

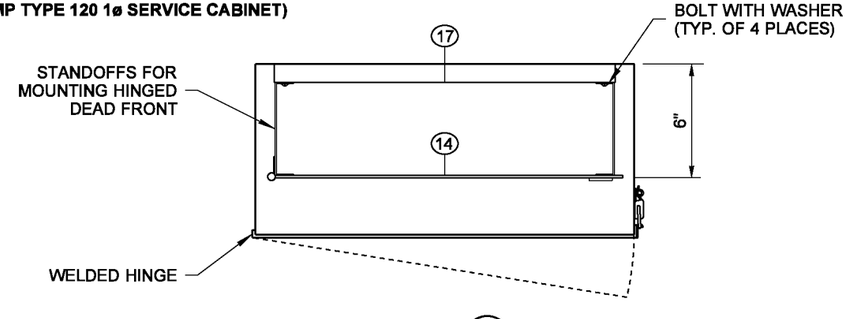



**LABEL "A"**

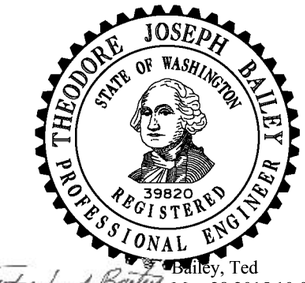
**KEY**

1. METER BASE PER SERVING UTILITY REQUIREMENTS ~ AS A MINIMUM, THE METER BASE SHALL BE SAFETY SOCKET BOX WITH FACTORY-INSTALLED TEST BYPASS FACILITY THAT MEETS THE REQUIREMENTS OF **EUSERC DRAWING 304** ~ METER BASE ENCLOSURE SHALL BE FABRICATED FROM TYPE 304 STAINLESS STEEL
2. MAIN BREAKER (DPST ~ SIZE PER BREAKER SCHEDULE)
3. PHOTOELECTRIC CONTROL BREAKER (SPST ~ 15 AMP ~ 120/240 VOLT)
4. TEST SWITCH (SPDT ~ SNAP ACTION ~ POSITIVE CLOSE ~ 15 AMP ~ 120/277 VOLT ~ "T" RATED)
5. PHOTOELECTRIC CONTROL UNIT ~ SEE **STANDARD SPECIFICATION 9-29.11(2)**
6. BRANCH BREAKER (DPST ~ SIZE PER BREAKER SCHEDULE)
7. SPARE BREAKER ~ SEE BREAKER SCHEDULE (DPST ~ 20 AMP ~ 240/480 VOLT)
8. CONTACTOR ~ SEE BREAKER SCHEDULE
9. RECEPTACLE BREAKER (SPST ~ 20 AMP ~ 120/240 VOLT)
10. RECEPTACLE ~ GROUNDED (GFCI ~ 20 AMP ~ 125 VOLT)
11. ISOLATED NEUTRAL BUSS ~ 14 LUG COPPER
12. MOUNTING HOLE ~ SEE **STANDARD PLAN J-10.20** FOR MOUNTING DETAILS
13. 1/4" **(IN)** DIAMETER DRAIN HOLE ~ DRILL BEFORE GALVANIZING
14. HINGED DEAD FRONT WITH 1/4 TURN FASTENERS OR SLIDE LATCH ~ DEAD FRONT PANEL BOLTS SHALL NOT EXTEND INTO VERTICAL LIMITS OF THE BREAKER ARRAY(S)
15. CABINET MAIN BONDING JUMPER ASSEMBLY ~ BUSS SHALL BE 12 LUG TINNED COPPER ~ SEE **STANDARD PLAN J-10.20** FOR CABINET MAIN BONDING JUMPER ASSEMBLY DETAILS
16. METAL WIRING DIAGRAM HOLDER
17. REMOVABLE SUBPANEL FOR EQUIPMENT
18. SCREENED VENTS ~ TWO REQUIRED (ONE EACH SIDE) ~ LOUVERED PLATES
19. TRANSFORMER BREAKER (DPST ~ 15 AMP ~ 480 VOLT)
20. DRY TRANSFORMER (480/120 VOLT) ~ 3 KVA ~ COPPER BUSSED AND COPPER WOUND
21. 12-CIRCUIT PANEL BOARD ~ MINIMUM SIZE WITH MAIN BREAKER
22. LABEL CABINET WITH BUSSWORK RATING
23. 6-CIRCUIT PANEL BOARD ~ MINIMUM SIZE
24. UTILITY DISCONNECT SWITCH ENCLOSURE WITH COVER ~ OMIT IF UTILITY DOES NOT REQUIRE THE DISCONNECT SWITCH

## TYPE C SERVICE CABINET
**(60 AMP TYPE 120 1ø SERVICE CABINET)**




**SECTION 3**




Bailey, Ted
May 28 2015 10:09 AM

# SERVICE CABINET TYPE C (0 - 60 AMP TYPE 240/480 VOLT SINGLE PHASE) STANDARD PLAN J-10.18-00

SHEET 2 OF 2 SHEETS

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DRAWN BY: COLBY FLETCHER